Tippecanoe County Drainage Board

Minutes December 7, 2005 Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger and Kerry Daily from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller, member KD Benson was absent.

Approval of Minutes

John Knochel made a motion to approve the Nov. 2, 2005 Drainage Board minutes as written. Ruth Shedd seconded the motion. The Nov. 2, 2005 Drainage Board Meeting minutes were approved as written.

Hadley Moors PD

A requested continuance by the developer was granted for Hadley Moors PD.

Lauren Lakes Section 2

Brandon Fulk of Schneider Engineering appeared before the Board to request final approval for Lauren Lakes Section 2 Subdivision. The 24-acre site was located on the south side of County Road 500 North west of County Road 75 East and east of Prophets Ridge Subdivision. This section was a continuation of the previously approved Lauren Lakes Subdivision and outlet through an un-named tributary to Burnett Creek along the east boundary. The County Farm Regulated Drain existed in the southwestern portion of the site. A system of swales and storm sewers directed into an onsite detention basin would collect the site's drainage.

Brandon stated offsite flow of runoff would be redirected around the project site and outlet to the unnamed tributary. Prophets Ridge outfall would be left as is and would not be impeded. The detention facility was designed to handle water quality by the use of four bays and elongating the drain time of the pond. Brandon stated the overall drainage design had been previously approved. He concurred with the December 2, 2005 Burke memo and at this time was requesting final approval for Section Two. In response to the Surveyor's inquiry, Brandon explained the path of the rerouted offsite drainage. The Surveyor stated a letter of concurrence from Mr. Ratcliff would be necessary for the file (while not made a condition), as he owned property adjacent to the project. He was prepared to recommend final approval for Lauren Lakes Section 2 with the conditions as stated on the December 2, 2005 Burke memo. John Knochel made a motion to grant final approval for Lauren Lakes Section 2 subject to the conditions on the December 2, 2005 Burke memo. Ruth Shedd seconded the motion. Lauren Lakes Section 2 was granted final approval with conditions as stated on the December 2, 2005 Burke memo.

Meadowgate Estates Section 2

Paul Couts of C&S Engineering appeared before the Board to request final approval for Meadowgate Estates Section 2. Mr. Fred Kuipers developer of the site was in attendance. Paul submitted an acceptance of fees- associated with the Stormwater Phase II program and drainage review-letter from Mr. Kuipers, N.O.I. and proof of publication documentation. The 23-acre site was located east of County Road 75 East north of County Road 500 North and a continuation of the Meadowgate Estates Subdivision. An existing lane known as Shooting Star would provide access to the proposed 10-lot section of the overall Subdivision project. Paul explained part of the site drained under County Road 500 North and part drained northwest under said access drive. Runoff of the development would drain to a natural tributary of the Wabash River or to an on-site tributary to Burnett Creek. Under the present conditions, natural drainage outlets would not be altered. Paul stated there was no detention storage required and water quality was the focus today. The existing drainage swales, dry detention storage as well as the addition of a second buffer strip and additional dry detention storage would maintain the water quality for the area. At that time Paul stated they concurred with the December 2, 2005 Burke memo conditions and requested final approval. He added the site would be served by septic systems. Lots 15, 16 and 17 soils were the most critical and could possibly require perimeter drains. Easements were acquired. The Surveyor asked Paul to take a second look at the sanitary system design stopping short of making it a condition. In the event of a malfunction some kind of treatment for septic drains should be in place. The Surveyor recommended final approval subject to the conditions as stated on the December 2, 2005 Burke memo for Meadowgate Estates Section Two. Ruth Shedd seconded the motion. Meadowgate Estates Section Two was approved subject to conditions as stated on the December 2, 2005 Burke memo.

Roadworks Manufacturing

Alan Jacobsen of Hannum Wagle and Cline appeared before the Board and requested final approval for Roadworks Manufacturing. The former Aertz Airport site was located on the south side of County Road 300 North and east of State Road 25 North. A system of swales would direct the site's drainage to a dry detention basin in the northwest corner which outlet to the right of way of County Road 300 North and conveyed into the state highway drainage system ultimately discharging to the west in Wildcat Creek. At the request of Commissioner Knochel, GIS was utilized for review of the site. Alan stated a new driveway entrance off County Road 300 North would be utilized as access for construction vehicles. Construction of a well and septic was planned. No land disturbing activity south of the existing runway was proposed. Hannum Wagle and Cline had previously contracted Vester and Associates to complete the initial drainage analysis and technical report. Alan stated as a result of the capacity constraint of the collection point for the State Highway drainage system, the site's release rate was reduced proportionately. The actual release rate for this site was considerably less than required by the ordinance. Water quality treatment structures would be utilized as well and located at the northwest corner. All water would be routed through the storm structure devise. An easement was acquired for the devise location and would be accessible for maintenance purposes. The Surveyor stated it was a BMP for water quality. Alan concurred with the December 2, 2005 Burke memo conditions and requested final approval for Roadworks Manufacturing. The Surveyor asked if the septic system would require a perimeter drain. Alan stated they were in the process of approval and a review by the State Department of Health. The Surveyor stated if a perimeter or curtain drain outlet to the detention facility, a second look at the system design would be warranted. Alan concurred they would be willing to review the design as needed. The Surveyor then stated due to the absence of easements around the treatment or detention facility, a covenant would be required to maintain the facilities. In response to Alan's inquiry, the Surveyor stated either an easement or the covenant would suffice. The Surveyor recommended final approval subject to the conditions stated on the December 2, 2005 Burke memo as well as the added condition of the provision of drainage easements around the detention facility and BMP or execute a covenant for maintenance. John Knochel made a motion to grant final approval of Roadworks Manufacturing subject to the conditions stated on the December 2, 2005 Burke memo as well as the added condition of the provision of drainage easements around the detention facility and BMP or execute a covenant for maintenance. Ruth Shedd seconded the motion. Roadworks manufacturing was granted final approval with the conditions on the December 2, 2005 Burke memo as well as the aforementioned added condition.

Weathersfield PD

Robert Gross of R.W. Gross and Associates appeared before the Board to request final approval for Weathersfield PD. The developer Gregg Sutter was in attendance as well. The site was located on the east side of County Road 800 East south of County Road 150 South. A single private access drive with side ditches was planned. On site drainage would discharge to a branch of the South Fork Wildcat Creek that meandered to the west toward County Road 800 East along the north property line. Detention would not be required for the development, as the natural drainage of the site would not be altered and runoff was reduced as much as fifty percent. The Surveyor stated he walked the site with the developer and Mr. Gross. He asked if perimeter or curtain drains were needed. Mr. Gross stated the lots needing perimeter drains were all located along the ravine. The Surveyor noted his concern that possible malfunction of the drains would require some treatment before entering into the drainage system. Mr. Gross stated they would confer with him on the requirements and he was willing to make any additions to the design. The Surveyor recommended final approval subject to the conditions on the December 2, 2005 Burke memo. John Knochel made a motion to grant final approval with the conditions stated on the December 2, 2005 Burke memo. Ruth Shedd seconded the motion. Weathersfield PD was granted final approval with the conditions as stated on the December 2, 2005 Burke memo.

Bridge Mill Subdivision Phase 1

Tim Beyer of Vester and Associates appeared before the Board to request final approval for Bridge Mill Subdivision Phase 1. He presented a map of the entire site for review by the Board. Farmington Subdivision was located to the West and Northridge Subdivision was located to the South of the Subdivision. The developer Brian Keene was in attendance as well as several landowners. The 147-acre site was located on the north side of County Road 200 North between County Roads 400 East and 500 East. The majority of the property drained to the north into a branch of Dry Run (Crist-Fassnacht Ditch) and eventually discharged to Wildcat Creek. The remaining portion of the site drained southerly to Wildcat Creek. Four stormwater detention ponds were proposed for the overall development. Pond A would be constructed immediately northwest of Phase 1 of the overall development and would be developed during Phase 1. The remaining detention ponds would be constructed during future phases of the development. Curbed streets, storm sewers and drainage swales would also accommodate the site's drainage. Phase 1 of the development lied within the southeast corner of the overall site and consisted of 42 lots. A conceptual drainage plan was previously provided. A portion of the site would drain into an existing culvert

under County Road 200 North then into a drainage swale which eventually ran into a depressional area to the south of the site. Currently approximately 13 acres drain into the existing culvert and upon development that amount would be reduced to approximately 8 acres. The remaining five would drain to Pond A. Pond A was designed as a stormwater quality measure and combined with the onsite drainage swales would achieve the required sediment removal. At that time Mr. Beyer requested final approval from the Board. Ruth Shedd then asked for Public Comment.

Brian Elmore 4619 Foxmoor Lane- The Meadows at Northridge Subdivision approached the Board and discussed his concerns with the project. He expressed concern of the overall development's drainage. Tim stated there were three accesses from the property to adjoining streets. Foxmor Lane would be continued to the development in Phase 1. Mr. Beyer stated there would be eight phases to the development. The planned cluster system located immediately to the west of Phase 1 would eventually be replaced with municipal sanitary lines. Mr. Elmore then expressed concern that eventually the mound or cluster system would be built upon. He stated he knew the Board's review today was drainage; however he wanted to clarify the overall plan and phases of this development. Jon Huston 40 Huntington Way of Northridge Subdivision approached the Board. His property was located across County Road 200 North. He stated runoff from the site drained to a retention area in the corner of his property. Mr. Spencer had visited the site several times in the past due to flooding of their cul-de-sac. He asked if the culvert under 200 North would be replaced. In response to Mr. Knochel's inquiry, Mr. Spencer stated it was not demonstrated to him runoff would be increased therefore the culvert would not be replaced. Mr. Beyer stated they felt it would be simpler to decrease the amount of runoff than replace the culvert. .Mr. Huston then asked if the mound system required a perimeter drain. The Surveyor stated at this point it was unknown as there was no design to review. He stated the Highway Department and the Surveyor's office would not sign the construction plans until the design for the sanitary system was presented and reviewed. Mr. Beyer stated the State Health Department would review the sanitary plans. The Surveyor explained the concern was possible conflict between the sanitary lines and the road and drainage infrastructure. As far as the actual sanitary system's technical design, they do not approve it however; the Surveyor/Drainage Board would approve the location and grade. Doug Excell 42 Hillshire Court Northridge Subdivision approached the Board. He stated his home bask up to the detention area. In seven years he had seen two one hundred -year storms. He had seen the runoff cross County Road 200 North then run through back yards on occasion and felt the drainage in that area was inadequate already. His concerns were the additional increase of the area's drainage as well as the septic/sanitary system's drainage impact the new development may cause. He felt unless there was some other way of diverting the runoff, he felt the current system could not manage the flow. He had seen (in the last five years) the detention pond area fill up within twenty feet of the back door of a home. In response to John Knochel inquiry, Mr. Excell stated the detention pond had been mowed and the cattails had been cleaned out in the past. The Surveyor asked Mr. Beyer if he had reviewed the original design of Northridge Subdivision. He stated he had not. The Surveyor stated the original drainage study of Northridge Subdivision should indicate the amount of runoff entering the system and would answer some of these inquiries. He had made a site visit the day before and the swale and pond could benefit from additional maintenance. Mr. Beyer stated he felt the drainage plans for Bridge Mill PD would improve the current conditions. Richard Harlow 4609 East 300 North, trustee for his father's estate north of the project site's location approached the Board. In response to Mr. Harlow's inquiry Mr. Bever stated Pond A would be constructed during Phase 1 and serve more than Phase 1. He stated if perimeter drains were required they would ultimately drain to Pond A. In the event additional lots were warranted, Pond B would be constructed with a future phase. In response to Mr. Excell's inquiry, the Surveyor stated he had not walked the north end of the site. Mr. Excell stated north of Pond A the land is "loaded with natural springs." He wanted the Board to know the previous landowner watered his cattle with the spring. The water ran continuously and was present at this time. John Knochel then indicated on GIS the location of the natural spring, as he was aware of it. The Surveyor stated wet bottom ponds would pick up the water and would help the water quality of the pond. Pond A was planned to be a wet bottom pond. Donna Props 4529 East 200 North Lafayette approached the Board. She stated Gunstra Builders informed her the culvert size would be increased. She also was concerned with the additional runoff and had experienced flooding. The Surveyor stated while he was prepared to recommend final approval with conditions today, as the total acreage runoff was decreased, he did have concerns with the drainage. Ruth Shedd asked if a continuance to January's meeting was warranted. John Knochel noted he agreed with Ruth Shedd and reiterated the Surveyor would not sign construction plans until sanitary/septic plans were submitted for review. He asked how far away the submission was. Mr. Beyer referred to Brian Keene, developer. Mr. Keene stated he was looking at different options for a septic/sanitary design. The Surveyor interjected the question today was the 42 lots of this phase. Mr. Keene responded a mound system would be constructed however the type was the question. The Surveyor stated he would like to see Vesters review the Northridge Subdivision Drainage Study to. This would answer the question whether the existing conveyance (including the existing pond) from County Road 200 North through the various phases of Northridge Subdivision was capable of handling the new development. He thought it was capable. John Knochel made a motion to move for continuance of Bridge Mill Phase 1 until the January meeting. Ruth Shedd seconded the motion. Bridge Mill Phase 1 was continued to the January 2006 meeting. John Knochel noted if the landowners of Northridge Subdivision would review the maintenance of the pond, it could assist the Board in their decision.

Other Business

Buffalo Wild Wings Encroachment Petition

Brandon Fulk of Schneider Engineering appeared before the Board and presented a Petition to Encroach upon the SW Elliott Regulated Drain. The encroachment was located at the Buffalo Wild Wings site. The Attorney had prepared a Resolution granting the Encroachment Petition. The Surveyor recommended to the Board approval of Resolution 2005–03-DB approving encroachment on the SW Elliott Regulated Drain for Buffalo Wild Wings. John Knochel made a motion to approve Resolution #2005-03-DB for the encroachment on the SW Elliott Regulated Drain. KD Benson seconded the motion. Resolution #2005-03-DB granting the encroachment on the SW Elliott Regulated Drain as petitioned was passed. Recorded copies would be provided to the Surveyor Office for the record.

Lewis Jakes Reconstruction/Maintenance Amended Assessments

The Surveyor stated he had investigated concerns of landowners at the August 29th Landowner Hearing as well as concerns of the Auditor office. As a result of the investigation he was presenting an amended landowner assessment list for approval and certification to the County Auditor. The Attorney stated the parcels which were omitted from the revised assessments would not change the remaining assessments. The revision would not increase or decrease said remaining assessments. Only the following stated parcels would be removed, as they were found not to be located within the Lewis Jakes watershed. The following parcels were within series: 13203800- #61, #260, #237, #259,#292, #248, #226, and #40 within series 13204400-#210, #209. The Surveyor stated the parcels were located north of 850 North and a portion of Larry Underwood's property which was tiled and ran to the east. John Knochel made a motion to approve the amended drain assessments for the Lewis Jakes Regulated Drain as submitted. Ruth Shedd seconded the motion. The amended Lewis Jakes Regulated Drain Assessments were approved as submitted and would be certified by the Board for collection starting in May 2006.

Marshall Branch / Box Ditch Petition to Encroach

The Surveyor stated this was not on the Agenda; however a Petition to Encroach on the Box Ditch by Purdue University was presented for action. He stated the encroachment was reviewed in detail with the petitioners and his office was satisfied with the depth of the encroachment. Resolution #2005-04-DB was submitted for approval as petitioned. John Knochel made a motion to approve Resolution #2005-04-DB regarding the Encroachment of the Marshall Branch on the Box Regulated Open Ditch with Purdue University as the petitioner. Ruth Shedd seconded the motion. Resolution #2005-04-DB was passed as presented. It was noted a recorded copy would be required to be submitted to the Surveyor office for the file.

Ordinance #2005-51-CMDB/ 1st Reading

Ordinance establishing a fee schedule for stormwater quality management permits and inspections

The Attorney stated the Board felt it would be prudent and of interest to the public to present this ordinance at both the Commissioners meeting and the Drainage Board meeting for 1st reading. Therefore he presented Ordinance #2005-51-CMDB for 1st reading by the Drainage Board today. The Commissioners had previously approved the ordinance on 1st reading and would approve said ordinance on 2d reading Dec. 19th, 2005 at 10 a.m. He stated any amendments would be stated at that time depending on public comments. Either the Surveyor or he was available for questions by the public. John Knochel made a motion to approve Ordinance #2005-51-CMDB on 1st reading. Roll Call: Ruth Shedd/Yes John Knochel/Yes KD Benson/ Absent. Ordinance #2005-51-CMDB was passed on Drainage Board 1st reading.

Steve Murray

Proposal for Professional Engineering Services on the Upper end of the JN Kirkpatrick Regulated Drain Design

The Surveyor presented a contract for professional services on the Upper end of the JN Kirkpatrick Regulated Drain for approval by the Board. Since there were major projects pending at the upper end of the said drain it was agreed to convert the agricultural tile at the upper end to an open ditch. The Surveyor noted the preliminary regional concept design was completed a couple years ago. The estimated fee of the contract was \$77, 240.00; the Surveyor noted the fee was very reasonable. The Board Attorney had asked for some changes on the contract and those changes had been completed. The Attorney stated Burke had incorporated their standard conditions into this contract. The Surveyor then requested approval of the contract for the Upper JN Kirkpatrick Stormwater Drainage channel as presented. John Knochel made a motion to approve the proposal for Professional Engineering Services on the Upper JN Kirkpatrick Stormwater Drainage channel (open ditch). Ruth Shedd seconded the motion. The contract as presented was approved.

Lindberg Village Phase 4/Letter of Credit #291

The Surveyor presented the following for acceptance: Letter of Credit #291 in the amount of \$9205.00 through Lafayette Savings Bank from A&K Construction written by Lafayette Savings Bank for Lindberg Village Phase 4 and Maintenance Bond # 1752954 in the amount of \$10700.00 from Atlas Excavating written by Shore West Security Services Inc. for Stonehenge Subdivision Phases 2&3. John Knochel made a motion to accept Letter of Credit #291 and Maintenance Bond #1752954 as presented by the Surveyor. Ruth Shedd seconded the motion. Letter of Credit #291 and Maintenance Bond #1752954 was accepted by the Board.

2006 Drainage Board Meetings Dates

John Knochel made a motion to accept the January 4, 2006 meeting date only at this time due to the absence of Commissioner Benson. Ruth Shedd seconded the motion. January 4, 2006 10 a.m. would be the next meeting date and time.

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As there was no publ was adjourned.	ic comment, John Kn	ochel made a motic	on to adjourn.	Ruth Shedd	seconded the motion.	The meeting

Ruin Snead, President	
John Knochel, Vice President	
	Brenda Garrison, Secretary
KD Benson, Member	